IN THE CLAIMS

1. (Original) A method of generating an image sequence, comprising the steps of:

detecting scene irradiance using detectors in a focal plane array;

generating an output image sequence for each of the detectors based on the detected irradiance;

correcting the output image sequence generated by a first subset of detectors in the focal plane array and the output image sequence generated by a second subset of detectors in the focal plane array using the correction provided to the first subset of detectors.

2. (Original) The method of claim 1, further comprising the step of generating a corrected output image sequence based on the correction provided to the detectors in the focal plane array.

3. (Original) The method of claim 1, wherein said step of correcting further comprises the step of calibrating detectors in the first subset of detectors.

4. (Original) The method of claim 3, wherein said calibrating step further comprises the step of calibrating the first subset of detectors using a blackbody source, wherein the blackbody source is defined by a blackbody density function.

5. (Original) The method of claim 3, wherein said calibrating step further comprises the steps of:

generating a gain and a bias for each detector in the first subset of detector; and

adjusting each detector's gain to one and each detector's bias to zero in the first subset of the detectors.

6. (Original) The method of claim 3, wherein said calibrating step further comprises the steps of:

generating a gain and a bias for each detector in the first subset of detectors; and

adjusting each detector's gain to one and each detector's bias to a defined value in the first subset of detectors.

7. (Original) The method of claim 5, wherein said adjusting step further comprises the step of adjusting biases of each detector in the second subset of detectors to zero.

8. (Original) The method of claim 6, wherein said adjusting step further comprises the step of adjusting biases of each detector in the second subset of detectors to the defined value.

9. (Original) The method of claim 3, wherein said calibrating step further comprises the steps of:

generating a gain and a bias for each detector in the first subset of detectors; and

adjusting each detector's gain to a preset value and each detector's bias to zero in the first subset of detectors.

10. (Original) The method of claim 3, wherein said calibrating step further comprises the steps of:

generating a gain and a bias for each detector in the first subset of detectors; and

adjusting each detector's gain to a preset value and each detector's bias to a defined value in the first subset of detectors.

11. (Original) The method of claim 9, wherein said adjusting step further comprises the step of adjusting biases of each detector in the second subset of detectors to zero.

12. (Original) The method of claim 10, wherein said adjusting step further comprises the step of adjusting biases of each detector in the second subset of detectors to the defined value.

13. (Original) A method of generating an image, comprising the steps of:

calibrating at least one first detector to generate a calibration information; and

generating an image using at least one second detector, wherein the generated image is altered as a function of the calibration information.

14. (Original) The method of claim 13, wherein said calibrating step further comprises

calibrating the at least one first detector using a blackbody source, wherein the blackbody source is defined by a blackbody density function.

15. (Original) The method of claim 13, wherein said calibrating step further comprises the steps of:

generating a gain and a bias for the at least one first detector; and

adjusting the least one first detector's gain to one and the least one first detector's bias to zero.

16. (Original) The method of claim 13, wherein said calibrating step further comprises the steps of:

generating a gain and a bias for the at least one first detector; and

adjusting the at least one first detector's gain to one and the at least one first detector's bias to a defined value.

17. (Original) The method of claim 15, wherein said adjusting step further comprises the step of adjusting biases of the at least one second detector to zero.

18. (Original) The method of claim 16, wherein said adjusting step further comprises the step of adjusting biases of the at least one second detector to the defined value.

19. (Original) The method of claim 13, wherein said calibrating step further comprises the steps of:

generating a gain and a bias for the at least one first detector; and

adjusting the at least one first detector's gain to a preset value and the at least one first detector's bias to zero.

20. (Original) The method of claim 13, wherein said calibrating step further comprises the steps of:

generating a gain and a bias for the at least one first detector; and

adjusting the at least one first detector's gain to a preset value and the at least one first detector's bias to a defined value.

21. (Original) The method of claim 19, wherein said adjusting step further comprises the step of adjusting biases of the at least one second detector to zero.

22. (Original) The method of claim 20, wherein said adjusting step further comprises the step of adjusting biases of the at least one second detector to the defined value.

23. (Currently Amended) The method of claim 13, wherein said generating step further comprises generating using the at least one second detector a readout signal [[y_n(i. j)]] $\underline{y_n(i, j)}$, wherein

$$y_n(i, j) = a_{n,S}(i, j) z_n(i, j) = b_n(i, j)$$

where $a_{n,S}(i, j)$ is a gain and $b_n(i, j)$ is a bias of the at least one second detector having coordinates i and j generating an image at a specific time n; $z_n(i, j)$ is a total average number of photons impinging on the at least on second detector at the time n.

24. (Original) The method of claim 23, wherein said generating step further comprises computing a bias correction for the readout signal of the at least one second detector.

25. (Original) The method of claim 24, wherein said computing step further comprises adjusting the readout signal of the at least one second detector using the computed bias correction.

26. (Original) The method of claim 25, wherein said adjusting step further comprises setting the bias of the at least one second detector so that $b_n(i, j) = 0$.

27. (Original) The method of claim 25, wherein said adjusting step further comprises setting the bias of the at least one second detector so that $b_n(i, j) = b$, wherein b is a defined value.

28. (Original) A method for generating an image using a focal plane array having a plurality of outer detectors and a plurality of inner detectors, comprising the steps of:

calibrating the plurality of outer detectors using a calibration source to calculate calibration information for the inner detectors;

generating an image using the inner detectors;

wherein said generating further comprises each inner detector generating a readout signal, y_n (i, j), as follows:

$$y_n (i, j) = a_{n,S}(i , j) z_n(,i, j) + b_n(i, j)$$

where $a_{n,S}(i, j)$ and $b_n(i, j)$ are gain and bias for each inner detector having coordinates i and j with the readout signal measured at time n; $z_n(i, j)$ is a total average number of photons impinging on each inner detector at time n;

computing a bias correction for each inner detector using the calculated calibration information; and

altering the inner detectors generated image using computed bias correction.

29. (Original) The method of claim 28, wherein said calibrating step further comprises setting bias of the outer perimeter detectors to zero.

30. (Original) The method of claim 28, wherein said calibrating step further comprises setting bias of the outer perimeter detectors to a defined value.

31. (Original) An optical apparatus for generating an image, comprising:

an imaging system having a plurality of detectors including at least one first detector and at least one second detector;

a first off-axis parabolic mirror placed in an optical path of said imaging system;

a second off-axis parabolic mirror; and

a movable field stop, wherein said movable field stop is placed in an optical path between said first and said second off-axis parabolic mirror;

wherein said imaging system passes light through said first off-axis parabolic mirror, said second off-axis parabolic mirror, and said movable field stop, and

wherein said imaging system calibrates at least one first detector to generate a calibration information and generates an image with at least one second detector, wherein the generated image is altered as a function of the calibration information.

32. (Original) The optical apparatus of claim 31, wherein a light incident on said first off-axis parabolic mirror is reflected towards said second off-axis parabolic mirror via said movable field stop.

33. (Original) The optical apparatus of claim 32, wherein said movable field stop directs said reflected light towards said second off-axis parabolic mirror, which then reflects said reflected light towards said imaging system plurality of detectors.

34. (Original) The optical apparatus of claim 31, further comprising a calibration source.

35. (Original) The optical apparatus of claim 34, wherein said calibration source is a blackbody source, wherein the blackbody source is defined by a blackbody density function.